

CARBOFIL NICU

TOP FEATURES

- The addition of Ni and Cu to the weld metal provides increased resistance to atmospheric corrosion compared to conventional C-Mn steels
- Copper percentage help preventing further oxidation of the weld bead
- Excellent mechanical characteristics and resistance to corrosion.

TYPICAL APPLICATIONS

- Infrastructures
- Transmission towers, barriers, ducting, chimneys
- Exhaust Systems

CLASSIFICATION

AWS A5.28	ER80S-G
EN ISO 14341-A	G 42 3 C1 Z
	G 42 4 M21 Z

SHIELDING GASES (ACC. EN ISO 14175)

C1	Active gas 100% CO ₂
M21	Mixed gas Ar+ >15-25% CO ₂

APPROVALS

TÜV	DB	CE
+	+	+

CHEMICAL COMPOSITION (WEIGHT %), TYPICAL, WIRE

C	Mn	Si	P	S	Ni	Cu
0.09	1.4	0.8	≤0.025	≤0.025	0.8	0.4

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Shielding gas	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J)		
						+20°C	-30°C	-40°C
Typical values	M21	AW	≥420	500-640	≥22	≥120	≥90	>80
	C1	AW	>420	500-640	≥22	≥100	≥47	

* AW = As welded

PACKAGING AND AVAILABLE SIZES

Wire diameter (mm)	Packaging	Weight (kg)	Item number
0.8	SPOOL (B300)	16.0	S08K016PCE11
1.0	SPOOL (B300)	16.0	S10K016PCE11
1.2	SPOOL (B300)	16.0	S12K016PCE11

TEST RESULTS

Test results for mechanical properties, deposit or electrode composition and diffusible hydrogen levels were obtained from a weld produced and tested according to prescribed standards, and should not be assumed to be the expected results in a particular application or weldment. Actual results will vary depending on many factors, including, but not limited to, weld procedure, plate chemistry and temperature, weldment design and fabrication methods. Users are cautioned to confirm by qualification testing, or other appropriate means, the suitability of any welding consumable and procedure before use in the intended application

Safety Data Sheets (SDS) are available here:



Subject to Change – The information is accurate to the best of our knowledge at the time of printing. Please refer to www.lincolnelectric.eu for any updated information.